Sea Grant
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Ohio Sea Grant College Program

Ohio's Great Lakes Charter Fishing Industry in 2002

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This publication summarizes the findings of the Great Lakes Sea Grant Network study on the charter industry in the Great Lakes. Individual fact sheets have been developed in conjunction with the Great Lakes Fisheries Leadership Institute for the following regions: Illinois-Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. The goal of the Great Lakes Fisheries Leadership Institute is to provide the next generation of fisheries leaders for the Great Lakes region with the skills they need to effectively interact with fisheries management agencies. This document was produced by the Ohio Sea Grant College Program as a part of the Great Lakes Fishery Leadership Institute project of the Great Lakes Sea Grant Network.

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Introduction

In the fall of 2002 and winter of 2003 the Great Lakes Sea Grant Network conducted a comprehensive survey of the charter fishing industry of the Great Lakes. The survey is an effort to provide an update on the status, characteristics and economics of the charter fishing business in the Great Lakes and is modeled after a similar survey conducted in 1994. All data reported here are for the year 2002.

Methods

In 2002, there were 794 licensed Ohio captains. This represents a decline of over 23% from the 1,034 captains in 1994. The Ohio Sea Grant program randomly surveyed 600 of Ohio's charter-fishing captains in January, February and March of 2002 using a modified Dillman mail survey technique (Dillman 1978). Non-respondents were sent up to three reminder letters. A total of 22 (3.6%) of the surveys were returned as undeliverable, out of business, or did not charter in 2002. An estimated 765 Ohio charter captains were active in 2002. A total of 310 captains returned surveys with usable data, a response rate of almost 54%.

Business

Of the responding captains, almost 92% were based in Ohio and about 8% were based in Michigan. Almost 99% of the captains' indicated that their homeports were located on Lake Erie. About 8% of the respondents indicated that one third of their charter trips were on a Great Lake other than Lake Erie.

The typical Ohio charter-fishing captain in 2002 has been licensed for 12.9 years. Business organization and boat ownership patterns are presented in this summary (**Table 1**). An estimated 651 (82%) of the responding captains operated their own charter firm. Almost 18% of the captains (114) were "work for hire" captains who did not own a charter boat. Most businesses (91%) operated one boat, which is typically 28.6 feet long, just over 13 years old, and powered by an inboard (84%), inboard/outdrive (11%) or outboard (5%) motor.

The average estimated replacement cost for an Ohio charter vessel is $69,939, and replacement cost for onboard business-related equipment is $9,189. About 40% of the respondents use a vehicle for towing their boat and other charter-related business. The average replacement cost of the vehicle was $29,388; for the trailer it is $3,812. The vehicle is used for boat towing 12% of the time and for other charter business 40% of the time.

Captains

Over 94% of the responding captains were "six-pack" operators, licensed to carry no more than six passengers. About 6% of the responding captains were licensed to carry more than six passengers. Notably, less than 13% of the captains rely on the charter business as their primary source of income (**Table 2**).

Almost 63% of the 304 responding captains are members of a professional charter captains association. The top three cited benefits from membership in a professional charter captains association are drug testing, education on current issues and regulations, and industry representation to state, federal and local authorities (**Table 3**).

Table 1
Ownership and Organization of Charter Boat Fishing Businesses in Ohio

Characteristic	Percent of Respondents	*Number of Respondents*
Business Ownership		***257***
Sole proprietor	90%	*230*
Partnership	4%	*10*
Corporation	6%	*15*
Other	<1%	*2*
Business Organization		***309***
Owned own boat	81%	*250*
Leased or rented boat	1%	*3*
Salaried employee	3%	*9*
Freelance hire per trip	13%	*40*
Other arrangement	2%	*7*

Table 2
Reasons for Entering/Remaining in the Ohio Charter Fishing Business
310 *Respondents were asked to check all items that applied.*

Reason	Percent of Respondents
Like the work	72%
Help people enjoy fishing	65%
Secondary source of income	56%
Primary income source	13%
Other	8%

Table 3
Benefits of Membership in an Ohio Professional Charter Boat Association
310 Respondents were asked to select the top three reasons.*

Benefit	Percent of Respondents
Drug testing	43%
Education on current issues and regulations	33%
Industry representation to state, federal, and local authorities	31%
Advertising	19%
Obtain business operation ideas and advice	18%
Get tips about fishing	14%
Can share charters	11%
Can obtain pricing information	8%
Increased business	7%
Group insurance	6%
Other benefits	4%

* *63% are members of a professional charter captains' association.*

Table 4
Estimated Trips and Revenues* for the Ohio Charter Industry
232 Respondents

Fish Species	Number of Trips	Average No. Trips/Business	Average Charge/Trip	Revenues Earned
Walleye				
Full day	16,503	25.4	$ 404	$ 10,241
Half day	2,069	3.2	310	998
Yellow perch				
Full day	3,268	5.0	328	1,647
Half day	1,510	2.3	261	606
Smallmouth bass				
Full day	2,135	3.3	403	1,322
Half day	137	.2	281	59
Steelhead				
Full day	879	1.4	414	559
Half day	98	<.2	299	45
Lake trout and Salmon				
Full day	521	.8	436	349
Half day	267	.4	319	131
Subtotals				
Full day	23,306	35.8		$ 14,118
Half day	4,108	6.3		1,838
Totals	**27,414**	**42.1**		**$ 15,956**

* *The numbers of trips are extrapolations of respondent trip rates applied to the estimated population of Ohio charter firms. Revenues are calculated from the average number of trips per business multiplied by the average charge per trip.*

Table 5
Services Offered by Ohio Charter Boat Operators

Service or Provision	Percent of Respondents: Included in Base Charter Fee	Percent of Respondents: Included for Additional Fee	*Number of Respondents*
Ice	96%	1%	*289*
Tackle	92%	5%	*286*
Bait	90%	8%	*288*
Photos/Video	19%	18%	*208*
Fish cleaning	11%	41%	*225*
Lodging/Food	7%	37%	*205*

Table 6
Average Annual Operating Costs for Ohio Boat-Owning Captains

Item	Expense	*Number of Respondents*
Fuel/Oil	$ 2,453	*214*
Dockage	1,396	*213*
Equipment repair	975	*213*
Labor (hired)	907	*213*
Advertising	798	*213*
Insurance	787	*213*
Miscellaneous	785	*213*
Boat maintenance & repair	714	*213*
Office & communications	692	*213*
Boat storage fees	513	*213*
Boat repair not covered by insurance	298	*213*
License fees	134	*213*
Drug testing/Professional dues	129	*215*
Boat launch fees	42	*213*
Total Operating Costs	**$ 10,629**	*213*

Trips

Responding captains average almost 36 full day and over six half-day paid charter trips per year (**Table 4**). Most (68%) of these are for walleye, 17% are for yellow perch, 8% for smallmouth bass, less than 4% for steelhead and less than 3% are for lake trout & salmon. Applying the response data to the total population of 651 active captains yields and estimated 27,414 charter trips of which 85% were full day and 15% were half-day trips. Half-day trips were defined as trips lasting less than seven hours.

June is the busiest month, with an average of 11.7 trips. Almost 28% of all trips taken in 2002 were in June. This was followed by July with 10.0 trips (24% of the total) and May at 6.1 trips (15% of total). Captains averaged 5.8 trips (14% of the total) in August, about 4.9 trips (12% of the effort) in September, 2.1 trips (5%) in October and just 1.3 trips (3%) in April. Only 0.1 of a trip average was reported in March.

Charter fees vary according to target species, length of the charter, and services offered. The most popular trip was the whole day walleye charter; its cost averaged $404 per boat (range $66 to $675).

Services and Provisions

Most charter businesses provide bait, tackle, and ice as part of their standard charter trip service. Some captains offered trip photos, videos, lodging and food for an additional fee (**Table 5**).

Costs and Returns

For boat owning captains, the largest annual operating expenses were boat fuel, boat dockage, and equipment repair (**Table 6**). Boat loan payments are a high cash outlay but are not part of operating costs.

The average cash requirement to operate the charter firm includes the operating expenses plus the boat loan payments. Average annual boat loan payments including principal and interest are $4,512 (**Table 7**). The average annual cost to operate an Ohio charter firm is $15,141 for those making boat loan payments and $10,629 for those who do not. This means that the typical charter firm that owns and operates a single vessel must generate sales of either $15,141 or $10,629 just to meet the cash needs of the firm depending on whether or not their boat is paid off.

Estimated average annual revenues are $15,956. The result is a net positive cash flow of $815 for firms making boat loan payments and a positive cash flow of $5,327 for firms not making boat loan payments. Depending on the situation, those firms with a positive cash flow could pay the day-to-day bills to operate the charter business from the revenues earned from chartering.

Economic costs are the costs of operating the charter firm except for the cost of a boat loan. The economic costs include operating costs ($10,629) plus capital costs. Boat loan costs are a cash requirement if a loan exists, but are not part of the economic costs. Capital costs include depreciation of the boat, and the opportunity cost of owning a boat instead of investing in stocks, bonds, or some other enterprise.

The average annual depreciation reported by responding captains was $5,796. Estimated replacement cost of the boat ($69,939) and equipment ($9,189) totals $79,128. Interest costs based on 5% of the replacement cost of the boat and equipment are $3,956. Thus the capital cost (depreciation + interest) is $9,752. The economic cost to operate a typical Ohio charter firm is $20,381 for a firm depreciating a vessel and $14,585 for a firm with a fully depreciated vessel. Any revenue in excess of these figures is the return to owner labor and management.

To provide a positive return to the operating captain for time and labor, the average Ohio charter business would have had to generate sales exceeding $20,381 or $14,585 to cover the average operating and capital costs. Depending on the depreciation and boat loan situation, the average Ohio charter firm operated at a net negative return of either (-$4,426) or a positive $1,370 for the owner's time and labor. At an average price of $404 for a full day walleye charter a captain would have to run as many as 51 trips to cover average operating and capital costs.

Promotion

Approximately 79% of Ohio charter customers come from over 50 miles or further away from the charter firm's homeport bringing nature based tourism dollars into the local lakefront community.

Captains used various methods of marketing and advertising and rated them for effectiveness on a scale of 1 (not effective) to 3 (very effective) (**Table 8**). Two advertising methods that we included in the 2002 survey that were not in the 1994 survey were a "world wide web site" and "tourism promotion agency publications/web site." Captains consider word of mouth, brochures, and direct mailings the most effective means of advertising. Over 94% of the respondents use word of mouth, 77% use brochures and 62% use direct mail for advertising. Almost half (48%) of the responding captains use a web site to advertise their business.

Lake Information

About 31% of 292 responding captains utilize the Great Lakes Forecasting System web site (***http://superior.eng.ohio-state.edu***) and over 23% of 285 respondents use the Sea Grant Coastwatch web site (***http://coastwatch.msu.edu***) for information on lake waves, water currents, surface temperatures, and lake status. Those accessing these web sites use them to make decisions, plan charter trips, improve charter safety, improve fish catch and help find fish.

Industry Trends and the Future

Of the 794 licensed captains in 2002, an estimated 29 were out of business or not actively chartering leaving an estimated 765 active captains. Of these captains, an estimated 651were boat owning charter firms that made an estimated 27,414 charter trips in 2002 compared to an estimated 30,693 trips made by 787 active charter firms in 1994 (Lichtkoppler 1996). In 2002, the 765 charter captains generated an estimated $10.97 million in gross revenues (651 firms x $15,956 per firm plus 114 captains for hire x $5,059). This is compared to the inflation adjusted estimated $11.02 million in gross revenues generated by 940 active captains in 1994 (787 firms x $13,372 plus 153 captains for hire x $3,275) (Lichtkoppler 1996).

Captains were asked to select the three most important problems facing the charter industry (**Table 9**). The top concern is lack of fish/ fish abundance was down, followed by the economy, impacts of exotic species (zebra mussels etc.), and illegal fishing practices. It is interesting to note that these concerns are outside the control of individual charter captains.

With almost 19% of the respondents planning to quit the business and some firms not making a positive net return to the operator's time and labor a continuing decline in the number of Ohio charter firms is expected (**Table 10**). However, the remaining charter firms in 2002 did make more trips per firm (42.1) than in 1994 (39.0). Most captains (55%) plan to increase the number of trips they make over the next five years and over 33% plan to increase their charter fees.

Table 7
Annual Cash Flow of Average Charter Firm in Ohio

Income/Expenses	**Businesses WITH Boat Loan Payments**	**Businesses WITHOUT Boat Loan Payments**	*Number of Respondents*
Average Revenue	$ 15,956	$ 15,956	*232*
Cash Flow Needs			
Average operating costs	10,629	10,629	*213*
Boat loan payments	4,512	0	*79*
Cash Needed	15,141	10,629	
Net Cash Flow	**$ 815**	**$ 5,327**	
Economic Cost			
Average operating cost	10,629	10,629	
Capital Costs			
Interest costs	3,956	3,956	
Depreciation	5,796	0	*47*
Total Economic Cost	$ 20,381	$ 14,585	
Net Return to Operator	(-4,426)	1,370	

Table 8
Methods of Advertising Used by Ohio Charter Fishing Businesses
279 Respondents

Advertising Method	**Effectiveness***	**Percent of Respondents**	*Number of Respondents*
Word of mouth	2.6	94%	*261*
Brochures	2.2	77%	*214*
Direct mailings	2.3	62%	*174*
Website	2.0	48%	*135*
Charter association publications	1.4	37%	*104*
Sport & travel shows	2.0	35%	*98*
Signs	1.6	30%	*83*
Magazine ads	1.7	27%	*76*
Newspaper ads	1.6	27%	*74*
Chamber of commerce publications	1.4	24%	*67*
Tourism promotion agency	1.5	23%	*65*
Telephone directory	1.7	12%	*33*
Other	2.3	9%	*24*

* *Scale = 1 (not effective) to 3 (very effective).*

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Strategies for Charter Businesses

It is a good idea to occasionally examine your charter business management with an eye to improvement. Results of the 2002 Great Lakes charter captain surveys suggest that to increase future profitability, charter captains should reduce expenses, increase revenues and aggressively market their industry.

Refinancing your boat at a lower interest rate, holding onto an older paid off boat in good condition or buying a newer boat at a favorable price to avoid large repair bills may be ways to reduce your expenses.

The most direct ways to increase revenues is to increase the price of and number of charter trips that are made and by offering additional services such as executive charters, or dive charter trips. Increasing your prices may or may not be possible depending on the demand and the specific market where you operate. Some captains increased the number of trips they made by following the seasonal nature of the fishery and fishing out of the "hot" ports at different times of the angling season. Half-day trips may be a way to lower costs to clients and increase the total number of trips made.

Captains should carefully market their product (a nature based tourism experience on a world class resource) and try to expand the client base to include the growing number of middle aged, nature-experience tourists with above average disposable incomes. Captains should seek ways to expand the client base by using industry-wide marketing efforts or by cooperating with local, state, and regional tourism bureaus.

Marketing toward non-traditional customers (i.e. women and minorities) may present opportunities for increased business as does marketing executive, fly-fishing, or other special charters. Captains may also want to consider differential pricing of charters to even out charter activity. Differential pricing (discount pricing) may help to increase charter trip activity in the spring and fall "shoulder" seasons.

Captains can continue to build on a positive professional image of the charter industry by stressing safety, effective efficient angling opportunities, a higher than average catch rate, and a "world class Great Lake angling experience" in their marketing efforts.

Captains should consider membership in a professional charter captain's organization. Belonging to a professional organization allows members to work with decision makers, fishery managers, and regulators from an organized power base.

References

Dillman, D.A. 1978. *Mail and Telephone Surveys: The Total Design Method.* New York: John Wiley and Sons.

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Table 9
Concerns of the Ohio Lake Erie Charter Fishing Industry
310 Respondents

Concerns	Percent of Respondents
Lack of fish/Reduced abundance	48%
The economy	42%
Impacts of exotic species (zebra mussels)	32%
Illegal fishing practices	23%
Poor weather/climate	21%
Drawing clients	21%
Over harvest of fish stocks	21%
Boating equipment and operating costs	20%
Fisheries management	15%
Other problems	12%
Fish consumption advisories	12%
Toxic contaminants	11%
Un-sportsmanlike behavior of captains	9%
Poor weather forecasting	8%
Overcrowding of the fishery	7%
Government regulations	7%
Un-sportsmanlike behavior of anglers	7%
Lack of one-day nonresident fishing license	5%
Changes in forage fish populations	4%
Lack of information on the fishery	2%
Changes in water currents	2%
Avian botulism	1%

Table 10
Five-Year Plans of Ohio Lake Erie Charter Captains
310 Respondents

Activity	Percent of Respondents
Increase of number of annual trips	55%
Increase prices of charter services	33%
No major changes	22%
Quit the charter business	19%
Buy/Operate newer boat	17%
Buy/Operate bigger boat	11%
Branch out into other fishing related businesses	8%
Other	8%
Expand into multi-activity and/or non-fishing charters	7%
Decrease number of annual trips	7%
Hire additional first mate(s)	4%
Buy/Operate an additional boat(s)	4%
Buy/Own charter boat	3%
Hire additional charter captain(s)	3%
Decrease Prices	1%